

DRAFT Docket No. 1828K US

Response to Non-Final Office Action dated March 31, 2006

Overview

5 Applicant amended the independent claims 1, 10, 17, 20, 21
and 25 to recite, in part, a **check valve** operably connected to a
fluid source for preventing fluid leakage through a pump for
monitoring bladder pressure during venous refill
detection(emphasis added). The Examiner can find support at
10 Applicant's paragraphs {0052} and {0082}, Figure 5, at element
54, and original claims 21 and 25. The Applicant added new
claims 26-31.

Response to 102(b) Rejection in view of Cone U.S. Pat. 5,591,200

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The Office Action rejected claims 1-25 under 35 U.S.C.
section 102(b) as being anticipated by Cone '200. Specifically,
the Action stated in part, "a fourth valve 98 and a check valve
90".

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The Applicant's amended independent claims are not
anticipated. Anticipation is focused on the invention claimed.
Cone '200 discloses an electrically activated solenoid valve.
As shown in the Parker reference and supported with the Wudyka
25 affidavit (herein "Affidavit"), a solenoid valve is not a check
valve.

The Federal Court stated "anticipation requires disclosure
in a single reference of each element of the claim under
30 consideration." See W.L. Gore & Assocs. V. Garlock, 721 F.2d
1540, 220 USPQ 303 (Fed. Cir. 1983). Cone '200 does not

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anticipate the invention as claimed. The amended claim recites in part,

5 "a single pressure sensor communicating with the first bladder and the second bladder, and a check valve operably connected to the fluid source for preventing fluid leakage back through a pump for monitoring bladder pressure during venous refill detection."

10 The Cone '200 valve 90 is not a check valve. The Cone '200 valve 90 is a bidirectional solenoid valve, which is defined as an electrically activated valve. Cone '200 discloses a "normally shut solenoid-operated fill valve 90". The valve 90 is for controlling the output of the pump and a solenoid valve at each bladder. A solenoid valve operates on a purposeful
15 electrical signal. See the Parker reference and the Affidavit.

20 The Applicant's check valve 54 and the Cone '200 solenoid valve 90 are structurally different valves, and the Applicant's invention is claiming the check valve unlike what is disclosed or taught in Cone '200. See Cone '200 at col. 7, at lines 34-37 and Figure 5 at element 90 as compared with the Parker reference and Figure 5 at element 54 of the present invention. The operation of the electrically activated solenoid of Cone '200 is described at column 14, lines 31-35. Valve 104 is similar
25 described in Figure 5 as element 90 of Cone '200. For support please refer to the Affidavit.

30 A check valve and solenoid valve both have a plunger and a seat, but the valves are structurally and operationally different. The check valve plunger moves off its seat when a specific pressure difference is met across the valve. By contrast, the solenoid valve is electrically activated to move the plunger off its seat and allow flow. The Cone '200 valve 90

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requires a "purposeful control signal". For support please see refer to the Affidavit.

Therefore, Cone '200 does not anticipate because Cone '200 is disclosing a solenoid valve, which is structurally different from the check valve in the Applicant's invention. Without all of the elements as claimed in the Applicant's invention, the patent office has not established its prima facie case of anticipation and the Applicant is entitled to his invention without more. See In Re Oetiker, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992).

The Affidavit evidence is intended to help explain the technical differences between the Cone '200 solenoid valve and the Applicant's check valve 30. See Ex parte Franklin, 41 USPQ 43 (Pat. Off. Bd. App. 1938) ("[I]f it were obvious to install applicant's device to increase ..., the device would have been used years ago"). Also, the Applicants affidavit supports evidence of secondary considerations. See Cable Elec. Prods., v. Genmark, Inc., 770 F.2d 1015, 226 USPQ 881, 887 (Fed. Cir. 1985) ("[e]vidence of secondary considerations is always to be considered".)

New Claims

The Applicant added new dependent claims 26-31. All the claims are directed to, in part, the check valve operates without an electrical signal. Support can be found in, at least, Figure 5, at paragraph [0053] and [0057], the Affidavit, and in the original filed claims. Claims 2, 5, and 18, to identify a few, describe a solenoid valve in communication with

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and responsive to a controller and, by contrast, Figure 5, as supported by the Affidavit and the Parker reference.

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The Applicant respectfully requests allowance of the amended independent claims and the dependent claims depending therefrom based on allowable independent claims.

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Applicant respectfully requests an Examiner interview, if the above amendments do not place this application in a condition of allowance. Applicant authorizes the Commissioner of Patents to charge deposit account 190254 for any late fees or charges necessary to avoid abandonment. I can be reached direct at (508) 261-8476 or .

Respectfully yours,



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June 2006

Commissioner for Patents
Attention of Examiner Michael A. Brown
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313

Dear Examiner:

I am an inventor of U.S. Patent Application Serial No. 10/784,323.

My review of U.S. Patent 5,591,200 to Cone, at figure 5, shows a valve, item 90. The valve is described and denoted as a solenoid valve. My invention, patent application U.S. 2005/0187500, shows a check valve, item 54.

A solenoid valve is not a check valve. A solenoid requires electricity and a control signal from electronics to operate. The valve 90 will remain either open or closed depending on the type, until a purposeful signal is applied to the valve to make it change its state. A check valve, operates passively. In the direction of flow, the valve allows fluid to pass through it relatively unfettered. If the condition of flow changes so that the fluid may tend to reverse direction, the valve, solely by its construction, stops the flow from occurring in that reversed direction.

This valve, item 90, as applied to patent number 5,591,200 is used to allow flow of a fluid from the pressure source to the manifold when required. Without a purposeful control signal to the valve, fluid will not flow. The check valve, item 54, shown in patent application U.S. 2005/0187500, is used to prevent the flow of air from the manifold toward the compressor during the Vascular Refill detection measurement process. During the process, the compressor is off, and the pneumatic circuit downstream is pressurized, meaning a condition for potential reversed flow exists. For successful Vascular Refill, the pneumatic circuit must remain pressurized.

There are many advantages of using a check valve over a solenoid valve. One is cost. A typical check valve is only a fraction the cost of a solenoid valve. A second is weight and complexity. A check valve is a fraction of the weight and requires no electrical connections or control signals. Thirdly, check valves do not use power, which in small, portable, devices which employ battery operation, is advantageous. Fourth, check valve reliability can also be much higher than a solenoid due to the passive nature of its operation. Solenoids snap quickly, causing wear of the components involved. Check valves operate in a very gentle, low impact, fashion and are under very low stresses. Lastly, check valves are silent, which for a device used in close proximity to a sleeping patient is a great advantage. Solenoids exhibit a sharp, startling sound that often awakens a patient.

I declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Sincerely yours,



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Re: Serial No.: 10/784,323
Docket No.: 1828K

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Sir/Madam:

Applicant herewith submits the following documents in connection with the above-referenced application:

- Information Disclosure Statement transmittal; and
- Form PTO/SB/08B – Information Disclosure Statement by Applicant form
- Copy of the reference cited one (1) page.